## A Workshop on the Management Needs to Minimize Vessel Collisions with Whales in the Hawaiian Islands Humpback Whale National Marine Sanctuary and other National Marine Sanctuaries

September 3 - 5, 2003 Wailea Marriott, an Outrigger Resort, Maui, Hawai'i

## **Terms of Reference**

In recent years collisions between ships and whales have been recognized as a significant source of injury and death for certain populations of large whales. Available data indicate that all types of vessels may hit whales, but that most serious injuries and deaths are due to large vessels more than 80 meters long. Most attention in this regard has focused on North Atlantic right whales because of the species' low abundance (about 300 whales) and large proportion of vessel-related deaths (more than one-third of all documented deaths over the past dozen years have been due to ships). However, data on stranded whales also indicates that other species of whales, including humpback whales, are subject to such collisions. For example more than one-quarter of all dead humpback whales stranding between Delaware and North Carolina in the 1990s died as a result of ship strikes. In Hawaii, the occurrence of collisions between vessels and humpback whales appears to be increasing. Although there are very few records of such collisions before the 1990s, at least 7 collisions have occurred in Hawaii since 1998, including four that resulted in the death or serious injury of struck whales. Given increasing trends in the numbers of both humpback whales and vessels in Hawaiian waters, it seems likely that the frequency of such collisions will increase in the near future,

The Hawaiian Humpback Whale National Marine Sanctuary (HIHWNMS), in cooperation with the National Marine Fisheries Service and the State of Hawaii, is responsible for protecting humpback whales in Hawaii. To assess ship strike risks in Hawaii and to identify possible actions to reduce their occurrence, NOAA's Hawaiian Islands Humpback Whale National Marine Sanctuary Advisory Council will convene a meeting of resource managers, scientists, and representatives of the maritime community to examine the following goals:

(1) review available information on the risks of vessels hitting whales and the factors affecting the magnitude of those risks;

(2) identify possible measures to reduce the risk of whales being hit by different types and sizes of vessels keeping in mind vessel operating characteristics and constraints;

(3) review effectiveness of existing regulations relating to whale encounters and collisions in Hawaiian waters; and (4) prepare a summary report with recommendations for the Chair of NOAA's HIHWNMS Advisory Council Vessel Strike Working Group on (1) whether the issue of ships hitting whales merits special attention within the National Marine Sanctuary Program generally, and the Hawaiian Humpback Whale Sanctuary in particular, and (2) if so, the research, management and regulatory actions that should be taken in collaboration with other agencies and industry groups to reduce the risks of such collisions.

To meet these goals, invited speakers will be asked to summarize information on various related topics including: the distribution, abundance, and behavior of humpback whales in Hawaii; the response of whales to vessels and vessel noise; and technological options for preventing ship strikes (e.g. acoustic alarms); the occurrence of ship collisions in Hawaii, Alaska, and elsewhere and factors related to those collisions; actions that have been taken and planned to mitigate collisions between North Atlantic right whales and ships; patterns and plans concerning commercial and recreational vessel traffic in Hawaii, including plans to develop a high-speed inter-island ferry service; the characteristics, constraints, and economic importance of vessel operations in Hawaiian waters; and the relevant legal authorities and enforcement efforts for implementing related mitigation measures.

Based on presented information, three working groups will be formed to consider possible means of reducing collisions risks with various types and classes of vessels. These groups will be asked to identify and assess possible actions that vessel operators and resource managers might take to reduce the likelihood of whales being struck, the most appropriate means of implementing actions that are deemed appropriate (e.g., by public education and outreach, voluntary participation programs, regulations, etc.), and possible research and monitoring needs. If participation numbers in any one working group becomes too large, that group will be divided into smaller groups and will be asked to replicate the group discussion. Working group 1 will consider measures as might be taken to reduce the likelihood of whales being hit by large commercial vessels (e.g. cargo vessels, cruise ships, and interisland transport vessels). This group will be asked to consider measures such as additional research needs, posting a special watch, training and educating crews, outreach mechanisms, using reduced speeds within certain areas, following certain routes, avoiding certain areas, modifying or developing new regulations, etc. Working group 2 will consider possible measures to reduce the likelihood of whales being hit by commercial passenger and support vessels operating on a daily basis in near shore waters of Hawai'i (e.g., commercial whale watching vessels, diner cruise vessels, dive, snorkel, parasail, commercial sportfishing, and sail boats, i.e. vessels covered by 46 CFR Subchapters C. K, T). This group will be asked to consider possible training and education of vessel crews, using reduced speeds within certain distances of whales, and other possible actions. Working group 3 will consider possible measures to reduce collisions involving private recreation vessels, including possible public education and outreach measures and using reduced speeds within certain distances of whales.

Based on the presentations and working group deliberations, participants will be asked to consider what policies and actions, if any, NOAA's HIHWNMS SAC Working Group should recommend to the SAC to guide research, management and regulatory actions to minimize ship strike risks.

